health education literature and scholarship in this area? And why do weaccept that random and variable acquisition of knowledge and skills, irrespectiveof the evidence for pedagogical best-practice, is good enough for our specialtyand for our patients?
This talk will dealwith possible reasons that we may be blinkered to important aspects of learningin radiation oncology. It will outline the knowledge that we *do* have to guide us, and the benefits ofworking more cooperatively in education across professions and jurisdictions.By paying attention to the 'forgotten foundation', that of high quality teachingand training, we dramatically enhance our chances of achieving the goals in quality,safety, effectiveness and leadership in cancer patient management, for which westrive.

SP-0178
The future of surgical oncology
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The role of cancer surgery has been consolidated over the years but drastic changes are taking place and Surgical Oncologists need to be prepared for substantial changes. Traditionally, cancer treatment rested on tissue diagnosis: a sample of the affected area is taken, analyzed and classified according to its morphology. "Tissue diagnosis" results into "tissue-based treatment". As times are rapidly changing and we are becoming accustomed to "molecular diagnosis", leading to "genetically informed treatment plans", surgical oncologists should be up to date with newly described diagnostic and therapeutic options. Genetic counseling is also reshaping: lo prevalence (but high penetrance) genes have been associated to the risk of developing breast cancer; more interestingly, several other genetic markers (high prevalence but low penetrance) are being identified. Improved understanding of their specific role will twist the way family clinics are run. Advanced diagnostic tools are being developed and their availability will also modify the way we treat patients: digital tomosynthesis will probably reconfigure breast cancer screening; liquid biopsy is slowly but steadily being introduced into clinical practice, in view of optimizing neoadjuvant treatment as well as palliative treatment, the whole practice of follow-up and other steps of clinical practice. A multidisciplinary approach is mandatory – it is a *condition sine qua non* for the surgical oncologist to understand issues and problems from the point of view of medical and radiation oncologists radiologists and pathologists, without dismissing nurses and social workers, psycho-oncologists, geneticists, an others. Complex and inter-specialty treatment options are becoming routine (e.g. intra-operative radiotherapy). The success of new treatment plans will necessarily open new, previously unthinkable, therapeutic options. Patients' advocacy and a sympathetic approach is extremely rewarding, beside science and research. Patients are at the center of our practice and social mandate. It is therefore to keep in mind the complexity of issues affecting cancer patients, cancer survivors and their relatives in their every day's life. Education is significantly modified, with remote-learning and training labs becoming available; virtual education is becoming popular and relatively in-expensive and young generations are rather accustomed to such new educational tools. The ongoing attempt in homogenizing education with other international tween societies aims to allowing exchanges, improving knowledge and boosting cross-fertilization. The political role of cancer surgeons should be kept in mind at all times, with surgeons firmly determined to play a substantial part within the multidisciplinary oncology team.

SP-0179
Imaging in lung cancer radiotherapy: beyond the "pictures"
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Lung cancer is still today the leading cause of death worldwide despite the availability of a variety of treatments. In particular Radiation Oncology is widely involved in lung cancer management, both as a neo or adjuvant therapy as well as a definitive one.
As the suffix "Radio-" suggests, the Radiologist and the Radiotherapist have been "step-brothers" since their origins, as co-actors in the main steps of treatment: staging / treatment planning and follow-up.
An accurate staging is essential in treatment planning in order to include macro- and micro-scopic cancer and to avoid unwanted toxicities. Lung injury is common in patients treated with Radiotherapy. The knowledge of radiological patterns of lung abnormalities after non surgical treatments is critical to accurately assess the overall effectiveness of these therapies and to differentiate normal appearances from incomplete treatments and/or local recurrences. Nowadays, a new multidisciplinary challenge for our disciplines is required: the "individualized medicine". The idea is to "design" a patient personalized therapy by identifying and integrating multimodal prognostic factors in models of treatment outcomes and also in clinical-decision support systems. Clinical imaging is particularly involved in this new field, the so-called "Radiomics" process, which offers a comprehensive and non-invasive "photograph" of patients and cancer heterogeneity.
Indeed in recent years we have witnessed a continual evolution of both Radiology and the Radiologist. Diagnostic Imaging has moved from focusing on image quality to a molecular level, from pictures to data. An important contribution has been provided by nuclear medicine, not only in identifying pathological sites, but also in outlining more active components. The "anatomical" evolution has offered the Radiotherapist the capability to better define the target and the "functional" evolution the capability to select the right one. The Radiologist, similarly, has evolved from a photographer to an interpreter and, in the future, will become a decision maker.
The aim of this lecture is to make a "journey" through the evolving role of the doctor as an "image artist" of lung cancer Radiotherapy.

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Teaching Lecture: Trade off between standardisation and individualisation

SP-0180
Trade off between standardisation and individualisation
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Teaching Lecture: DNA repair and response for beginners

SP-0181
DNA repair and response for beginners
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Dysregulation of the DNA damage response (DDR) is associated with a predisposition to cancer and affects responses to DNA-damaging anticancer therapies. Dysregulation of a certain DNA repair pathway may be